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ABSTRACT

Impact must be defined before it can be assessed. Part of the definition is that impact is the consequences of funded vocational education research and development projects and programs, not just the fact of the dissemination of the products of the projects. Programs are defined as a group of funded research and development improvement projects that are seen as having related goals. Impact can be both short term and long term. Short term impact is the consequence(s) of a program improvement project and can be asssessed at the end of the funded life of a project. Long term impact is the consequence(s) of the research and development programs resulting from contributions of several related improvement projects, and is assessed 12 months or more after the funding of three or more of the projects has ceased. Within both short term and long term impact, there are several different types of impact, e.g., intended or unintended, direct or indirect, and positive or negative. The flexible impact assessment system of the Research and Development Section in Illinois begins at the planning stage. The program goals, identified by the Research and Development staff, provide a framework for identifying long term impact. The objectives for meeting program goals become project goals which serve as a basis for identifying short term impact. Project staff participate in impact assessment from project writing through the life of the project. This impact assessment system uses a naturalistic inquiry approach. Data are collected from project staff at the end of projects; in-depth assessment of seven to ten projects is performed; and long term impact is assessed by program area. The information developed is used for further research and project funding considerations. (KC)

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IMPACT ASSESSMENT OF RESEARCH AND DEVELOPMENT PROGRAM IMPROVEMENT EFFORTS

A Presentation to The
American Vocational Education Research Association

by
Wynette S. Barnard

American Vocational Association Annual Convention
Atlanta, Georgia
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Impact Assessment of Research and Development Program Improvement Efforts

The primary purpose of funded vocational education research and development activities is to improve vocational education. John Washburn, in his presentation on building the conceptual and material commitments to dissemination and impact assessment, pointed out that a "good" program improvement process has not only solid research, development and dissemination components, but also recognizes the need for promoting and assessing the extent to which the whole process benefits some pre-determined public(s). He further stated, that without impact, there is no program improvement. In order to determine if funded program improvement efforts really do make a difference, we must somehow identify or obtain indicators of the changes (e.g. skills, knowledge, attitudes, behaviors, interests, and perceptions) that occur among specific audiences. Because research and development activities are expensive, it is critical to assess their impact to satisfy accountability needs and also as a basis for making better judgments about further dissemination and future funding activities.

Conceptualizing impact assessment and all that it implies is a difficult task; one which has been surrounded by controversy and contradictory ideas related to definitions and the implementation of an impact assessment system within a bureaucratic structure. Many studies and projects have identified impact as the effects of dissemination, e.g., how many teachers are using a product. In Illinois, we consider impact to be a step beyond dissemination. Impact is defined as the consequences, positive or negative, of funded vocational education research and development projects and programs. As Carol Sanders pointed out in her presentation, systematic dissemination is a prerequesite link to assessing the impact of research and development.

Successful dissemination is an important, but not exclusive, step to achieving impact.

In the definition of impact, we have included the consequences of both projects and programs. The distinction between projects and programs is a key element in the conceptualization of our impact assessment system. A research and development program is defined as a group of funded research and development program improvement projects that are seen by the Research and Development staff as having related goals. The identification of programs should be made by the Research and Development staff based upon the Department of Adult, Vocational and Technical Education and Research and Development goals. Examples of such programs might be the service areas of agriculture, business, etc., or general programs such as competency based education or sex equity. Impact assessment of a program is concerned with the "big" ideas or questions. For example, if competency based education is a program area, impact assessment would be related to the question, "Does competency based, education make a difference?" Numerous projects would likely be funded within this program, e.g., development of a competency based agriculture curriculum for high school students, or a competency based curriculum for vocational teacher education. Determining the impact of these projects would help identify what progress is being made toward the "bigger" question. Therefore, the impacts of funded projects make a contribution toward the impacts of research and development programs.

There are several advantages to working within the framework of programs when assessing impact. These include:

1. Helping to eliminate the temptation to fund only low payoff, low risk projects because they have a high likelihood of showing a positive impact, in order to fulfill PL 94-482 impact requirements.

2. Assisting individual project directors to see that their project efforts contribute to an overall plan and set of goals, thus tying their project goals and impact assessment to a larger whole.
3. Aiding project directors in setting more realistic and attainable expectations.
4. Encouraging multiple-year efforts, thus relieving the unrealistic urge to solve persistent problems in a single year.

Whatever program areas are identified by the Research and Development staff, it is important that they relate to the overall goals of the department, yet are flexible enough to accommodate changing priorities. For example, we have recommended the formation of programs based upon 14 thrusts. The 14 thrusts were identified and refined by a variety of individuals and groups in Illinois and serve as the basis for planning vocational education in Illinois, for the eighties. This recommendation uses the 14 thrusts as the basis for the development of programs. By combining similar thrusts, five programs are created. One program could be assessed each year so that all programs would be assessed every five years.

Working within the framework of projects and programs, we have identified two main types of impact - short term impact and long term impact. Short term impact is the consequence(s) of a program improvement project and can be assessed at the end of the funded life of a project. Long term impact is the consequence(s) of research and development programs resulting from contributions of several related program improvement projects. Long term impact would be assessed 12 months or more after the funding of three or more of the projects within a program have ceased.

Within both short term and long term impact, there are several different types of impact that researchers should be aware of while planning for potential impact and when assessing impact. For example, impact can be intended or unintended. Using the example of a funded project to develop competency based curriculum for vocational teacher education, an intended impact might be that teachers change in their teaching method. If we discover that the majority of teachers in the program showed an interest in alternative styles of teaching as a result of competency based education, this would be an unintended impact. Impact can also be related to the goals of a project or program or unrelated to the goals. For example, if a goal of the project was that teachers in the competency program will be able to demonstrate their ability to perform as teachers in an actual classroom, and this occurred, it would be a direct impact. If, as a consequence of the project, there was increased community awareness about vocational education, and this was not a stated goal, it would be considered an indirect impact. We must also recognize that impacts can be positive or negative. Although for program improvement to occur, there must be positive impact, we must be able to recognize that negative impacts may exist. The identification of negative impacts in an early phase of a project can also lead to changes or modifications in "weak" areas of the program, thus changing negative impacts into potential positive impacts.

Having provided some background information on what impact is, I'd like to briefly describe some of the components of our impact assessment system. This system was designed specifically for the Research and Development Section in Illinois, taking into consideration the present structure and bureaucratic problems described by John Washburn earlier. We have attempted to develop a flexible and adaptable framework for the

Research and Development Section's use and implementation. This means that while we have identified major roles and responsibilities in the assessment process, there is flexibility as to who might assume the responsibilities, which would most likely be determined by the available resources of both time and money.

Impact assessment actually begins at the planning stage. The program goals, identified by the Research and Development staff, provide a framework for identifying potential long term impact. The objectives for meeting program goals then become project goals, which serve as a basis for identifying short term impact. Project staff become involved with impact assessment as they write a proposal and describe the potential impact of the project. The responsibilities of project staff throughout the funded life of a project are primarily to identify potential impacts and to report progress toward actual impact. Project staff are not involved in the actual assessment of impact, since impact assessment occurs after the funded life of a project.

More specifically, responsibilities of project staff include:

1. developing impact statements to be included in the proposal for each phase of the project,
2. reporting revisions of the impact statements and progress toward the achievement of impact in the quarterly progress reports to the Research and Development Section Staff,
3. reporting dissemination efforts and any dissemination follow-up information in their final reports,
4. providing information on impact in their final report, which includes any evidence of impact or progress toward impact, projections of long term impact and suggestions for gathering impact data,
5. meeting with impact assessors to provide information regarding

their perception of the project's impact and to recommend issues, people and consequences that should be followed-up.

Fulfilling these responsibilities will aid in the impact assessment process without placing an undue burden of time or money on project staff.

The impact assessment system utilizes a naturalistic inquiry approach to assess both short term and long term impact. Over the past two years we have struggled to determine the best, yet most realistically adaptable approach to assessing impact. We experimented with the ideas and issues related to collecting evidence of change through the use of pre and post tests, surveys, opinionnaires, etc. Yet, all of these methods deemed necessary the collection of a large amount of baseline data which is costly both in terms of time and money. Although it may seem ideal to have baseline data before commencing a project, we realized a large portion of each project's budget and several months of time would be used for the collection of such data. In addition, while methods such as surveys are particularly useful for collecting evidence on the effects of dissemination, they are less likely to collect evidence of peoples' perceptions of consequences of program improvement efforts. Thus, when considering the practical constraints, it seemed unlikely that a system involving these methods would be implemented in Illinois.

There are three major parts to the administrative aspect of the impact assessment system. The first involves the collection of data pertaining to impact from each project's staff at the termination of funding. We are recommending that each contract administrator meet with the project staff during the final month of funding for a summary or exit interview. At this point the contract administrator can collect evidence from the project staff concerning their perceptions of what impacts have occurred, and

future potential impacts of the project, as well as suggestions for further dissemination and for gathering other impact data. This method of collecting impact data from all projects requires a minimum amount of time (approximately an hour per project) and has the additional benefits of helping the contract administrator feel an ownership to the project and of providing a "closure" to project activities.

The second part of the administrative aspect involves an in-depth assessment of the short term impact of seven to ten projects. Based upon the recommendations of the contract administrators from the impact data collected during the exit interview, seven to ten projects will be selected for an in-depth impact assessment. The impact assessors can use the impact data already collected to obtain leads on people to interview and to identify sites where implementation has occurred. The assessors will then interview other relevant people recommended by project staff and investigate impact, using a naturalistic inquiry approach, in two to four implementation sites. The final report of each project can also be examined for supplemental data. The final report will contain information related to dissemination efforts, intended impact statements, and impact data which was collected during the funded life of the project. After collecting and compiling impact data, it is recommended that the impact assessors meet with the project staff to report and validate the findings.

The third part of the administrative aspect is the assessment of long term impact. Long term impact is assessed by program area, 12 months or more after completion of at least three projects within the program. We recommend that one program be selected for impact assessment each year. The impact assessors can review existing data on impact which includes information on the short term impact of projects gathered in the exit

interviews and in-depth studies. The assessors will investigate long term impact, using naturalistic inquiry, by making a second visit to the implementation sites identified in the in-depth short term impact studies. A program specific survey of major consequences may also be developed, based upon information gathered during the site visits. This instrument can be administered in other sites to validate findings.

Part of the flexibility of this system is in determining who assumes the responsibility for assessing the short term and long term impact. We recommend that the impact assessor be "independent", i.e., persons who were not directly involved in project activities. This provides numerous alternatives depending on resources available. Alternatives include contracting external impact assessors through the "Request for Proposal Process", using staff from another section within the state agency such as the Program Approval and Evaluation Section, having an impact specialist within the Research and Development Section, or dividing responsibilities among the Research and Development staff within the Department of Adult, Vocational and Technical Education.

Based upon this system, the impact assessment activities occurring each year would include:

1. Exit interviews to collect short term impact data on all projects whose funding was terminated. Because the average life of a project is usually three years (research, development, dissemination) this would involve approximately one-third of all funded research and development projects.
2. In-depth short term impact assessment of 7-10 projects whose funding was terminated.
3. Long term impact assessment of one program.

The reports of the impact assessors will provide valuable information on the consequences of funded research and development activities and needs for further research and development. This information can be used by the Research and Development Section staff for accountability purposes and when planning for future funding of research and development activities.

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